

# PHILOSOPHICAL TRANSACTIONS.

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Munday, May 7. 1666.

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## The Contents.

*A way of Preserving Birds taken out of the Egge, and other small Fetus's ; communicated by Mr Boyle. An Extract of a Letter, lately sent to Sr. Robert Moray out of Virginia, concerning an unusuall way of Propagating Mulberry-trees there, for the better improvement of the Silk-Work ; together with some other particulars, tending to the good of that Royall Plantation. A Method, by which a Glasse of a small Plano-Convex Sphere may be made to refract the Rayes of Light to a Focus of a far greater distance, than is usuall. Observations about Shining Worms in Oysters. Observations of the Effects of Touch and Friction. Some particulars, communicated from forrain Parts, concerning the Permanent Spott in Jupiter; and a contest between two Artists about Optick-Glasses, &c. An Account of a Book written by Dr. Thomas Sydenham, entituled, Methodus Curandi Febres, propriis Observationibus superstructa.*

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### *A way*

*Of preserving Birds taken out of the Egge, and other small Fætus's ; communicated by Mr. Boyle.*



His was imparted in a Letter, as follows ;  
 The time of the year invites me to intimate to you, that among the other Uses of the Experiment, I long since presented the Society, of preserving Whelps taken out of the Dams womb, and other *Fætus's*, or parts of them, in *Spirit of Wine* ; I re-  
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member, I did, when I was sollicitous to observe the Proceſſe of Nature in the Formation of a Chick, open Hens Eggs, ſome at ſuch a day, and ſome at other daies after the beginning of the Incubation, and carefully taking out the *Embryos*, embalmed each of them in a diſtinct Glaſs (which is to be carefully ſtopt) in *Spirit of Wine*: Which I did, that ſo I might have them in readineſſe, to make on them, at any time, the Obſervations, I thought them capable of affording; and to let my Friends at other ſeaſons of the year, ſee, *both* the differing appearances of the Chick at the third, fourth, ſeventh, fourteenth, or other daies, after the Eggs had been ſate on, *and* (eſpecially) ſome particulars not obvious in Chickens, that go about; as the hanging of the Gutts out of the *Abdomen*, &c. How long the tender *Embryo* of the Chick ſoon after the *Punctum ſaliens* is diſcoverable, *and* whiſt the Body ſeems but a little Organized Gelly, *and* ſome while after *That*, will be this way preserv'd, without being too much ſhrivel'd up, I was hindred by ſome miſchances to ſatiſſie my ſelf: but when the *Fetus's*, I took out, were ſo perfectly formed as they were wont to be about the ſeventh day, and after, they ſo well retain'd their ſhape and bulk, as to make me not repent of my curioſity: And ſome of thoſe, which I did very early this Spring, I can yet ſhew you. I know I have mention'd to you an eaſie application of what I, ſome years ſince, made publick enough; but not finding it to have been yet made by any other, and being perſwaded by Experience, that it may be extended to other *Fetus's*, which this ſeaſon (the *Spring*) is time to make proviſion off, I think the *Advertiſement* will not ſeem unſeaſonable to ſome of our Friends; though being now in haſte, and having in my thoughts divers particulars, relating to this way of Preſerving Birds taken out of the Egge, and other ſmall *Fetus's*, I muſt content my ſelf to have mention'd that, which is *Effential*, leaving divers other things, which a little practice may teach the Curious, unmention'd. Notwithſtanding which, I muſt not omit theſe two Circumſtances; the *one*, that when the Chick was grown big, before I took it out of the Egge, I have (but not conſtantly) mingled

mingled with the *Spirit of Wine*, a little Spirit of *Sal Armoniack*, made (as I have elsewhere delivered) by the help of *Quick-lime* : which Spirit I choose, because, though it abounds in a Salt not Sowre, but Urinous, yet I never observed it (how strong soever I made it) to coagulate Spirit of Wine. The other circumstance is, that I usually found it convenient, to let the little *Animals*, I meant to imbalme, lie for a little while in ordinary Spirit of Wine, to wash off the looser filth, that is wont to adhere to the Chick, when taken out of the Egge; and then, having put either the same kind of Spirit, or better upon the same Bird, I suffer'd it to soak some hours (perhaps some daies, *pro renata*) therein, that the Liquor, having drawn as it were what Tincture it could, the *Fetus* being remov'd into more pure and well dephlegm'd Spirit of Wine, might not discolour it, but leave it almost as limpid, as before it was put in.

*In the usefulness of  
Experimental Philo-  
sophy.*

### *An Extract*

*Of a Letter, sent lately to Sir Robert Moray out of Virginia, concerning an unusual way of propagating Mulberry trees there, for the better improvement of the Silk-Work; together with some other particulars, tending to the good of that Plantation.*

I am disappointed at this time of some Rarities of Minerals, Mettals, and Stones; but you may have them any other time, as conveniently, &c. I have planted here already ten thousand *Mulberry trees*; and hope, within two or three years, to reap good silk of them. I have planted them in a way unusual here, which advances them two or three years growth, in respect of their being sown in seed: And they are now, at writing hereof all holding good, although this has been a very long and bitter winter with us, much longer and colder, than ever I did find it in *Scotland* or *England*. I intend likewise to plant